# A NEW SPECIES OF *STILLINGIA* (EUPHORBIACEAE) FROM NORTHERN PERU

The predominantly neotropical genus *Stillingia* Garden ex L. was last revised by Rogers (1951), who recognized 23 American species. He did not treat the three or four paleotropical species that are distributed from Madagascar to Fiji. One additional species has since been described from Minas Gerais, Brazil (*S. argutedentata* Jabl., *Phytologia* 14: 451. 1967). A recently discovered species in northern Peru brings the total of American species to 25.

**Stillingia parvifolia** Sánchez Vega, Sagást. & Huft, sp. nov. TYPE: Peru. Dept. Cajamarca: Prov. Cajamarca, Distr. Namora, en la quebrada del Río Llallumayo, 2,775 m, 18 June 1984, *I. Sánchez Vega & W. Ruiz Vigo 3618* (holotype, CPUN, F neg. 62127; isotype, HUT). Figure 1.

Frutex glaber plus minusve ramosissimus, ramulis teretibus; folia brevipetiolata, alterna vel in brachyblastis 2–4 mm longis portata, laminae coriaceae, ovato-ellipticae, 6–11(–13) mm longae, margine callosae aequaliter serratae, dentibus glanduliformibus. Inflorescentiae terminales, bisexuales; cymulae masculinae uniflorae, bracteis navicularibus; cymulae femineae 1–3 basi inflorescentiae, sepala 3, orbicularia, navicularia, persistentia; capsulae globosae, profunde trilobae; semina (immatura) laevia, carunculata.

*Shrub*, glabrous, ± highly branched, the branchlets terete, ± maroon, the bark irregularly sulcate; short shoots 2–4 mm long. *Leaves* alternate or borne on short shoots, short-petiolate; petioles canaliculate, 1–1.5 mm long; blades coriaceous, ovate-elliptic, 6–11(–13) mm long, 5–6 mm wide, 1.25–2.2 times as long as wide, broadly obtuse to rounded at base, obtuse to rounded at apex; margin callose, minutely and remotely serrulate, the teeth glanduliform, 4–19 per side, the base eglandular; midrib conspicuous, prominent below, the secondary veins obscure. *Inflorescences* terminal, 1–2 cm long, bisexual. *Staminate cymules* single-flowered, the bracts obovate, acute, navicular, ca. 1.2 mm long, persistent, biglandular at base, the glands oblong or suborbicular, 0.8–1 mm long, patelliform; calyx 2-lobed, ca. 1 mm long; stamens 2, the filaments 1–1.2 mm long, the anthers 2, ca. 0.8 mm long, longitudinally dehiscent. *Pistillate cymules* 1–3 at base of inflorescence, single-flowered, the bracts as in the staminate cymules; sepals 3, orbicular, navicular, ca. 12 mm long, the apex truncate or obtuse, slightly erose; ovary sessile, 3-carpellate; styles 3, free, 1.5–1.7 mm long, recurved at tip. *Capsule* globose, glabrous, deeply 3-lobed, ca. 5 mm long; lobes of the persistent gynobase 3–4 mm long; seeds (only immature seen) ca. 4 mm long, ca. 1.5 mm wide, smooth, prominently carunculate.

Rogers (1951) distinguished two subgenera in *Stillingia*. Subgenus *Stillingia* is characterized by staminate cymules with 3–13 flowers, pistillate flowers with two or three well-developed sepals, and carunculate seeds, whereas subgenus *Gymnostillingia* (Muell. Arg.) D. Rogers is characterized by staminate cymules with a single flower, pistillate flowers with obsolete or minute and fugacious sepals, and usually ecarunculate seeds. The single-flowered staminate cymules of *S. parvifolia* would seem at first sight to place that species in subg. *Gymnostillingia*, but the ample and persistent sepals of the pistillate flowers and the carunculate seeds argue against an easy accceptance of that disposition. Furthermore, the restriction of subg. *Gymnostillingia* to Mexico and adjacent areas of Guatemala and the United States makes such a conclusion even more unlikely. In addition, *S. parvifolia* is not particularly close morphologically to any of the species that comprise subg. *Gymnostillingia*.

*Stillingia parvifolia* shares several specialized characters with two South American species of subg. *Stillingia*, *S. peruviana* D. Rogers (the only other species of the genus in Peru), and *S. bodenbenderi* (Kuntze) D. Rogers of Brazil and Argentina. All three species are shrubs, have small short-petiolate leaves that are often borne on small peg-like short-shoots, and leaf margins that are evenly serrate, often callose, and with peculiar glanduliform serrations.

The most reasonable interpretation of *S. par-*

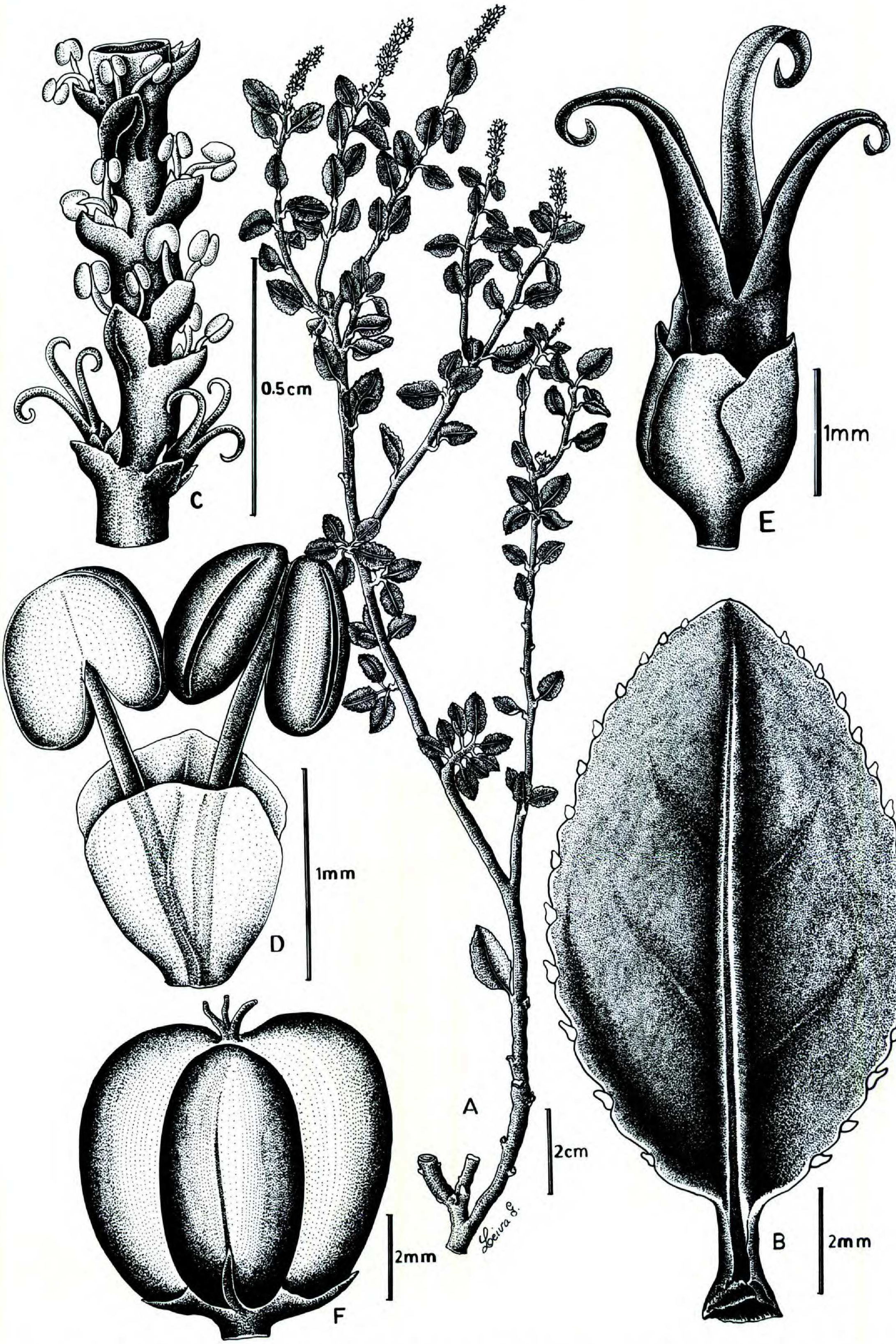


FIGURE 1. Stillingia parvifolia *(*Sánchez Vega & Ruiz Vigo 3618, *CPUN)*.—*A. Flowering branch.*—*B. Leaf.*—*C. Lower portion of inflorescence.*—*D. Staminate flower.*—*E. Pistillate flower.*—*F. Capsule.*

*vifolia* would seem to be that it belongs to subg. *Stillingia*, where it is particularly closely related to *S. bodenbenderi* and *S. peruviana*, and that it has developed a reduced staminate cymule independently from the species in subg. *Gymnostillingia*.

*Stillingia parvifolia* may be distinguished from its closest relatives by means of the following key:

KEY TO *STILLINGIA PARVIFOLIA* AND RELATIVES

1a. Staminate cymules 5–7(–9)-flowered; branchlets slender, wandlike, 1–1.5 mm thick; petioles 2–3(–7) mm long; blades (0.8–)2–4 cm long, tapering to an acute (rarely rounded) apex; staminate bracts plane.
  2a. Petioles 0–3 mm long; leaf margins prominently callose, the serrations obscurely glanduliform; staminate bracts rounded, not mucronate ..... *S. bodenbenderi*
  2b. Petioles 2–7 mm long; leaf margins obscurely callose, the serrations prominently glanduliform; staminate bracts deltate, mucronate ..... *S. peruviana*
1b. Staminate cymules 1-flowered; branchlets not wandlike, 2–3 mm thick; petioles 1–1.5 mm long; blades 6–11(–13) mm long, not tapering to apex, this rounded or obtuse; staminate bracts navicular ..... *S. parvifolia*

All three species in this group have highly restricted distributions and are poorly known. *Stillingia peruviana* is known from three collections in Huancavelica Province, Peru, while *S. bodenbenderi* is known from only two collections in Córdoba Province, Argentina, and a third from the state of São Paulo, Brazil. The distinctions between *S. bodenbenderi* and *S. peruviana* are not entirely convincing; the relative status of these two species will depend on the future availability of more ample collections.

*Stillingia parvifolia* is known only from the type collection from dry forest in a rocky ravine with clayey soil, where its associates include the shrubs *Myrica* sp., *Prunus* sp., *Piper* sp., and *Gynoxys* sp.; the herbaceous perennials *Calceolaria phaceliifolia* Edwin and *Dalea* sp.; as well as several annuals.

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LITERATURE CITED

ROGERS, D. J. 1951. A revision of *Stillingia* in the New World. Ann. Missouri Bot. Gard. 38: 207–259.

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